

**AMENDMENTS TO THE CLAIMS****IN THE CLAIMS**

Amend claims 1-15 as follows; add new claims 18-27.

**What is claimed is:**

1. (Currently amended) An immunoadsorber Immunoadsorber for blood treatment use in sepsis therapy in which there exist carrier materials, the immunoadsorber comprising a carrier of organic or synthetic polymers with bound poly or monoclonal antibodies aimed against to which are immobilized antibodies that bind to the complement factors C3a and/or C5a and to lipopolysaccharides (LPS) and if need be with antibodies aimed against further sepsis mediators wherein,

- a) the antibodies to C3a are specific for at least one peptide selected from the group consisting of SEQ ID NO: 1, 2, and 3; and
- b) the antibodies to C5a are specific for at least one peptide selected from the group consisting of SEQ ID NO: 4, and 5.

2. (Currently amended) The immunoadsorber Immunoadsorber according to Claim 1, wherein the antibodies are polyclonal antibodies.

3. (Currently amended) The immunoadsorber Immunoadsorber according to Claim 2, wherein the antibodies are avian antibodies of type IgY.

4. (Currently amended) The immunoadsorber Immunoadsorber of Claim 1, wherein further the specific antibodies against specific for sepsis mediators are contained as a function of the state of dysregulation varied as a function of the actual content of sepsis mediators in the blood.

5. (Currently amended) The immunoadsorber Immunoadsorber according to Claim 1, wherein the these antibodies are aimed against specific for at least one sepsis mediator selected from the group consisting of TNF, 1L1, 1L6, IL8 and/or IL10.

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6. (Currently amended) The immunoadsorber immunoadsorber according to Claim 1, wherein the bound antibodies are aimed against specific for at least one of the following peptide sequences of the complement factors C3a and C5a

C3a: NH<sub>2</sub>-KCCEDGMRQNPQR-COOH SEQ ID NO. 1  
NH<sub>2</sub>-RFSCQRRTRFISL-COOH SEQ ID NO. 2  
NH<sub>2</sub>-ITELRRQHARAS-COOH SEQ ID NO. 3  
C5a: NH<sub>2</sub>-QADYKDDDKLPAE-COOH SEQ ID NO. 4  
NH<sub>2</sub>-DDKLPAEGLDIENS-COOH SEQ ID NO. 5.

7. (Currently amended) The immunoadsorber immunoadsorber according to Claim 5, wherein the bound antibodies are aimed against specific for at least one of the following peptide sequences of the interleukins 1 $\alpha$  and 1 $\beta$

IL1 $\alpha$ : NH<sub>2</sub>-NCYSENEEDSSSID-COOH SEQ ID NO. 6  
NH<sub>2</sub>-GAYKSSKDDAKIT-COOH SEQ ID NO. 7  
NH<sub>2</sub>-WETHGTKNYFTS-COOH SEQ ID NO. 8  
  
IL $\beta$ : NH<sub>2</sub>-RISDHHYSKGFRQA-COOH SEQ ID NO. 9  
NH<sub>2</sub>-VQGEESNDKIPVA-COOH SEQ ID NO. 10  
NH<sub>2</sub>-ESVDPKNYPKKMEKRF-COOH SEQ ID NO. 11

8. (Currently amended) The immunoadsorber immunoadsorber according to Claim 5, wherein the bound antibodies are aimed against specific for at least one of the following peptide sequences of interleukin 6:

IL6: NH<sub>2</sub>-APHRQPLTSSERIDKQI-COOH SEQ ID NO. 12  
NH<sub>2</sub>-QNRFESSEEQARA-COOH SEQ ID NO. 13  
NH<sub>2</sub>-AITTPDPTTNAS-COOH SEQ ID NO. 14.

9. (Currently amended) The immunoadsorber immunoadsorber according to Claim 5, wherein the bound antibodies are aimed against specific for at least one of the following peptide sequences of interleukin 10

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IL10: NH2-SPGQGTQSENSCT-COOH SEQ ID NO. 15  
NH2-QMKDQLDNLLKES-CCOH SEQ ID NO. 16  
NH2-MPQAENQDPDIKA-COOH SEQ ID NO. 17  
NH2-LPCENKS KAVEQ-COOH SEQ ID NO. 18.

10. (Currently amended) The immunoadsorber immunoadsorber according to Claim 5, wherein the bound antibodies are aimed against specific for at least one of the following peptide sequences of TNF $\alpha$

TNF $\alpha$ : NH2-VRSSSRTPSDKPVA-COOH SEQ ID NO. 19  
NH2-KSPCQRETPEGAEAKPW-COOH SEQ ID NO. 20.

11. (Currently amended) The immunoadsorber immunoadsorber according to Claim 1, wherein the organic or synthetic carrier material comprises membranes of or particles of polystyrenes, carbohydrates such as including cellulose or agarose derivatives, or acrylates.

12. (Currently amended) The immunoadsorber immunoadsorber according to Claim 1 Claims 1 to 11, wherein the immobilized specific antibodies are covalently bound to the carrier material.

13. (Currently amended) The immunoadsorber immunoadsorber according to Claim 1 Claims 1 to 11, wherein the antibodies are fixed to the carrier materials via spacers or linkers.

14. (Currently amended) A method method for the production of immunoadsorber according to Claim 1, wherein antibodies aimed against C3a and/or C5a and LPS and, optionally, against further sepsis mediators are covalently or adsorptively coupled to carrier materials of organic or synthetic polymers.

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15. (Currently amended) A method according to Claim 14, wherein the antibodies are produced by immunisation of small mammals, including mice, rats or rabbits, or of birds, including chickens, with the corresponding antigens.

16. - 17. (Cancelled).

18. (New) A method of performing sepsis therapy of blood with the immunoadsorber of claim 1, the method comprising the steps of,

providing an amount of blood in need of sepsis therapy; and  
contacting the blood with the immunoadsorber of claim 1;

wherein the blood in contact with the immunoadsorber is either whole blood, or whole blood that had first been subjected to hemofiltration and/or concentration and/or dilution, prior to contacting the immunoadsorber.

19. (New) The method of claim 18, wherein the blood has not been subjected to hemofiltration prior to contacting the immunoadsorber.

20. (New) The method of claim 18 wherein the blood comprises intact cells or cellular debris.

21. (New) The method of claim 18 wherein the intact cells and/or the source of cellular debris are selected from the group consisting of bacteria, fungi or a subject's blood.

22. (New) An immunoadsorber for use in sepsis therapy, the immunoadsorber comprising a carrier of organic or synthetic polymers to which are immobilized avian antibodies specific for C3a and/or C5a.

23. (New) The immunoadsorber of claim 22, wherein the avian antibody is a chicken antibody.

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24. (New) The immunoadsorber of claim 22, wherein the avian antibody is specific for a peptide selected from the group consisting of SEQ ID NO: 1 to 5.

25. (New) The immunoadsorber of claim 22, wherein the avian antibody does not activate the complement system.

26. (New) The immunoadsorber of claim 23, wherein the chicken antibody does not activate the complement system.

27. (New) The immunoadsorber of claim 23, wherein the chicken antibody is specific for a peptide selected from the group consisting of SEQ ID NO: 1 to 5.